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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/041,634	01/10/2002	Shigenobu Nakamura	111650	6573

25944 7590 08/13/2003

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EXAMINER

VAN PELT, BRADLEY J

ART UNIT

PAPER NUMBER

3682

DATE MAILED: 08/13/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/041,634

Applicant(s)

NAKAMURA ET AL.

Examiner

Bradley J Van Pelt

Art Unit

3682

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 July 2003.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) 3-5 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2 and 6 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Election/Restrictions

1. Claims 3-5 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected species, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in Paper No. 6.

Specification

2. The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required: claim 1, line 6 recites the limitation “plurality of walls between the grooves;” there is no support in the specification for this limitation.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1, 2, and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over White, Jr. et al. (USPN 5,026,327), herein after White, in view of Sato (JP 10-2402).

White disclose an engine auxiliary unit driving equipment for transmitting an engine driving force from a crank pulley (27) fixed to an engine crankshaft to a plurality of engine units, one of which is an alternator for a vehicle, comprising: a unitary driven poly-V pulley, which is provided at least in the alternator, and a poly-V belt having top surface and, a plurality of projections extending parallel in a longitudinal direction so as to respectively engage with the

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grooves of the driven poly-v pulley, said poly-V belt being bridged between the crank pulley and the driven poly-V pulley so that the engine driving force is transmitted to said alternator via the poly-V belt and the driven poly-V pulley;

another of the engine auxiliary units other than the alternator is provided with another driven poly-V pulley (see. fig. 1);

White fails to disclose at least six grooves extending in a circumferential direction and a plurality of walls between the grooves;

the poly-V belt is composed of a plurality of pieces substantially divided in an axial direction of the driven poly-V pulley so that each piece of the poly-V belts has more than 2 and less than 6 of said projections and, each of said walls is lower than said top surface so that side surfaces of the projections adjacent to each other can directly face each other;

the respective pieces of the poly-V belts are wound in parallel on the another driven poly-V pulley to position perpendicular to the axial direction thereof so that the engine driving force is transmitted from the crank pulley, via the respective pieces of the poly-V belts, not only to the alternator but also to the another of the engine auxiliary units;

the respective weights per unit length of the pieces of the poly-V belts are different.

Sato shows at least six grooves extending in a circumferential direction and a plurality of walls between the grooves;

a poly-V belt is composed of a plurality of pieces (15, 16) substantially divided in an axial direction of the driven poly-V pulley so that each piece of the poly-V belts has more than 2 and less than 6 of said projections and, each of said walls is lower than said top surface so that side surfaces of the projections adjacent to each other can directly face each other;

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the respective pieces of the poly-V belts are wound in parallel on the another driven poly-V pulley to position perpendicular to the axial direction thereof so that the engine driving force is transmitted from the crank pulley, via the respective pieces of the poly-V belts, not only to the alternator but also to the another of the engine auxiliary units.

To modify the apparatus of White so as to provide at least six grooves in the pulley would have been obvious to one of ordinary skill in the art at the time the invention was made in view of the teachings of Sato that such an arrangement improves the amount of load that the belt can handle; therefore, the safety factor of the belt is improved.

To modify the apparatus of White so as to provide a plurality of pieces of a poly-V belt would have been obvious to one of ordinary skill in the art at the time the invention was made in view of the teachings of Sato that such an arrangement improves the belt life, therefore, decreasing the maintenance costs.

It would have been an obvious matter to alter the respective unit weights per^{cm} unit length of the poly-V belt, since such a modification would have involved a mere change in size of a component. A change in size is generally recognized as being within the level of ordinary skill in the art.

Response to Arguments

5. Applicant's arguments with respect to claims 1 and 2 have been considered but are moot in view of the new ground(s) of rejection.

Applicant's arguments filed July 8, 2003 have been fully considered but they are not persuasive. Applicant asserts that providing a poly-V belt having respective weights per unit length that are different from one another is not a mere change in a component size and thus is

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not obvious. Also, applicant argues that the having different respective weights per unit length is critical to the operation of the belt as evidenced by pg. 14, lines 1 and 2, of the specification. However, pg. 14 only states that the weights *may* be different and does not set forth that this is a critical limitation. As such, applicant has provided no evidence that having belt pieces with different weights per unit lengths are critical nor has the applicant submitted any evidence that any such an arrangement provides any unexpected results. Absent any evidence to the contrary, adjusting the weights per unit length of the belt so that they are different would have been an obvious matter to one of ordinary skill in the art at the time the invention was made.

Conclusion

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.


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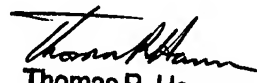
7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Bradley J Van Pelt whose telephone number is 703.305.8176.

The examiner can normally be reached on M-Th 7:00-4:30, 2nd F 7:00-3:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David A Bucci can be reached on 703.308.3668. The fax phone numbers for the organization where this application or proceeding is assigned are 703.872.9326 for regular communications and 703.872.9327 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703.308.2168.

BJVP 
August 8, 2003


Thomas R. Hannon
Primary Examiner